

## **Coastal Protection and Restoration Authority of Louisiana**

# Office of Coastal Protection and Restoration

# 2007/2008 Annual Inspection Report

for

# SEDIMENT TRAPPING AT THE JAWS PROJECT (TV-15)

State Project Number TV-15 Priority Project List 9

April 1, 2008 St. Mary Parish

#### Prepared by:

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#### I. Introduction

The Sediment Trapping at the Jaws Project (State Project No. TV-15) is located in the Teche/Vermilion Basin in the northeastern corner of West Cote Blanche Bay in St. Mary Parish near the intersection of the Charenton Drainage Canal and the bay. This area is known as "The Jaws". (See Appendix A).

The Sediment Trapping at the Jaws Project was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the ninth Priority Project List. The Sediment Trapping at the Jaws Project has a twenty year (20 year) economic life, which began in December 2004.

#### II. Inspection Purpose and Procedures

The purpose of the annual inspection of the Sediment Trapping at the Jaws Project (T/V-15) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, LDNR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan, 2005). The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the Sediment Trapping at the Jaws Project are outlined in Section IV.

An inspection of the Sediment Trapping at the Jaws Project (TV-15) was held on April 1, 2008 under mostly cloudy skies and mild temperatures. In attendance were Stan Aucoin, Pat Landry, Darrell Pontiff, and Tommy McGinnis from DNR Lafayette; John Foret from NOAA Fisheries; and Dale Garber from NRCS (for other inspections). The annual inspection began at the northern most terrace.

The field inspection included a visual inspection of randomly selected areas of the project site. Staff gauge readings, when available, and existing temporary benchmarks were used to determine approximate elevations of water and terraces. Photographs were taken (see Appendix B) and Field Inspection notes were completed in the field to record measurements and deficiencies (see Appendix D).

### III. Project Description and History

Construction of the Gulf Intracoastal Waterway (GIWW) in the 1920's provided a connection between the Atchafalaya River and the project area resulting in major hydrologic changes. As the holding capacity of the Atchafalaya Basin decreased, more and more freshwater was forced down the river's main channel, Wax Lake Outlet, and the GIWW. The result was what was once considered to be brackish marsh converted to fresh.

Sediment laden water from the Atchafalaya River gets to the project area via the GIWW as well as through West Cote Blanche Bay from the Atchafalaya Delta and Wax Lake outlet during strong southeasterly wind events. Construction of the terraces provides protection to the northern shoreline of West Cote Blanche Bay by reducing fetch and turbidity. The channels used to construct the terraces provide a conduit directing sediment rich waters from the GIWW into the project area building additional acres of marsh.

The principal project features include:

- ~38,700 linear feet of earthen terraces in "The Jaws"
- ~38,500 vegetative plantings

## IV. Summary of Past Operation and Maintenance Projects

**General Maintenance:** Below is a summary of completed maintenance projects and operation tasks performed since December 2004, the construction completion date of the Sediment Trapping at the Jaws Project.

No maintenance has been required on this project.

**Structure Operations:** There are no active operations associated with this project.

## V. Inspection Results

#### **Earthen Terraces/Vegetation**

The terraces appear to be in excellent post-construction condition. Settlement on the ends of the terraces, furthest from the main channel of the Jaws, is significant but still functional. Warning signs were all in place and stable. Nutria rats were seen throughout the terrace field, feeding on the vegetation. Since water levels were slightly elevated, submerged and emergent aquatic vegetation between the terraces wasn't as visible as during last year's inspection but still exists. Channels remain

fairly clear. No need for any maintenance at this time. (Photos: Appendix B, Photos 1–4)

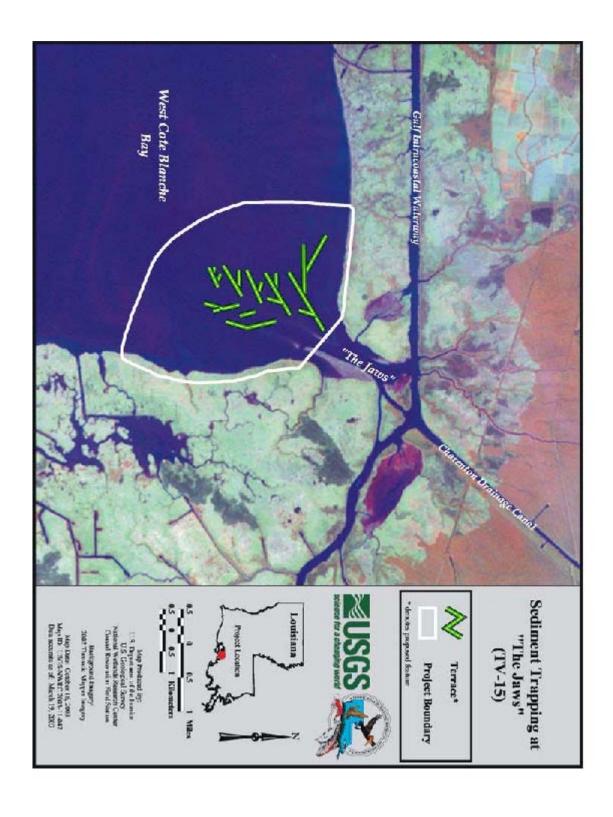
### VI. Conclusions and Recommendations

The Sediment Trapping at the Jaws Project is excellent condition and functioning as designed. There is no need for any maintenance at this time. Possible maintenance items in 2008/2009:

• Re-establish an accurate staff gauge in the area

## Appendix A

**Project Features Map** 



**Appendix B** 

**Photographs** 



Photo 1—typical terrace and warning sign



Photo 2—typical terraces





Photo 4—settled end of terrace

## **Appendix C**

**Three Year Budget Projection** 

# SEDIMENT TRAPPING AT THE JAWS/ TV15 / PPL 6 Three-Year Operations & Maintenance Budgets 07/01/2008 - 06/30/2011

Project Manager	O & M Manager	Federal Sponsor	Prepared By		
Stan Aucoin	Stan Aucoin	N/A	Stan Aucoin		
	2008/2009	2009/2010	2010/2011		
Maintenance Inspection	\$ 5,570.00	\$ 5,737.00	\$ 5,909.00		
Structure Operation					
Administration		\$ -	\$ -		
Maintenance/Rehabilitation					
08/09 Description:					
•					
54.5					
E&D					
Construction Oversight					
Construction Oversight  Sub Total - Maint. And Rehab.		I			
зир тогаг - тапп. Апи Кепар.	Ψ -				
09/10 Description					
E&D		\$ -			
Construction		\$ -			
Construction Oversight		\$ -			
	Sub Total - Maint. And Rehab.	\$ -			
10/11 Description:					
TO/TT Boompton.					
F8 D			0		
E&D Construction			\$ -		
			\$ -		
Construction Oversight		Sub Total Maint And Date	\$ - \$ -		
		Sub Total - Maint. And Rehab.			
	2008/2009	2009/2010	2010/2011		
Total O&M Budgets	\$ 5,570.00	\$ 5,737.00	\$ 5,909.00		
O &M Budget (3 yr Total) \$ 17,216.00					
Unexpended O & M Budget\$ 244,895.41Remaining O & M Budget (Projected)\$ 227,679.41					
Remaining U & W Bud		<u>\$ 227,679.41</u>			

## Appendix D

**Field Inspection Form** 

#### MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: TV-15 Sediment Trapping at the Jaws Date of Inspection: April 1, 2008

Structure No. N/A Inspector(s):Stan Aucoin, Tommy McGinnis, Darrell Pontiff (DNR) Pat Landry (DNR), Dale Garber (NRCS); John Foret (NMFS)
Structure Description: Terraces/Vegetation

Water Level Inside: Outside:
Type of Inspection: Annual Weather Conditions: Cloudy and Clear

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
	N/A	, j			
Steel Bulkhead					
/ Caps					
Steel Grating	N/A				
Cton Long	NI/A				
Stop Logs	N/A				
Hardware	N/A				
i laidwaie					
Timber Piles	N/A				
Timber Wales	N/A				
Galv. Pile Caps	N/A				
Vegetation	Good				
vegetation	0000				
Signage	Good			1	
/Supports					
-					
Rip Rap (fill)	N/A				
Earthen	Ellant			2,3 & 4	Terraces are in good condition. No repairs needed.
Embankment (terraces)	Excellent				

What are the conditions of the existing levees? Are there any noticeable breaches? Settlement of rock plugs and rock weirs? Position of stoplogs at the time of the inspection? Are there any signs of vandalism?

## **Appendix E**

**Locations to be Monitored**